

## ABSTRACT OF THE DISCLOSURE

An ink cartridge 111 holding a recording material used for printing therein has a sensor substitute module 170 to simulate  
5 operations of a cartridge having a built-in sensor. As a control circuit 222 of a printer 200 gives a sensor access instruction to the ink cartridge 111, the sensor substitute module 170 generates a specific signal and outputs the specific signal via an output module 178. The specified signal is equivalent to a signal that  
10 represents a sufficient level of remaining ink and is expected to be output from the built-in sensor of the cartridge. The ink cartridge 111 is thus applicable to both a printer designed for the use of a cartridge with a built-in sensor and a printer designed for the use of a cartridge without a built-in sensor. Namely the  
15 cartridge of the invention is compatible with the cartridge having the built-in sensor.